IOWA DEPARTMENT OF NATURAL RESOURCES

ADMINISTRATIVE ORDER

EMERGENCY ORDER - ACUTE BACTERIA MCL

IN THE MATTER OF:	**ADMINISTRATIVE ORDER NO. 2008-WS-05**
WINNESHIEK WILDBERRY WINERY, L.L.C.	
Public Water Supply Facility No. 9630210	

TO: **Yvonne Barnes and Kenneth Barnes**
Winneshiek Wildberry Winery, L.L.C.
1966 377th Street
Decorah, IA 52101

I. The public water supply system for the Winneshiek Wildberry Winery, L.L.C. (Winery), serves a population of 122 persons, including employees and customers. The system is classified as a transient non-community system and is open all year. The facility does not provide disinfection. A violation of the maximum contaminant level (MCL) for total coliform bacteria, which may pose an acute risk to public health, was confirmed at your public water supply facility based on samples collected on July 30, 2008 and September 2, 2008. All five of the samples taken on July 30, 2008 were total coliform bacteria positive. One of the July 30, 2008 samples was Fecal/ E. coli positive. A sample collected on September 2, 2008 was positive for total coliform bacteria. On September 5, 2008 a Notice of Violation (NOV) letter was issued for an acute bacteria MCL violation.

II. Pursuant to the rules of the Iowa Department of Natural Resources (Department), you are required to immediately implement the following pursuant to this emergency administrative order (order):

CEASE PROVIDING WATER

1. Immediately cease providing water from this source to consumers until an adequate chlorine residual is established and maintained and the water is tested as absent of

coliform bacteria or there has been connection to a new source that is absent of coliform bacteria.

PROVIDE PUBLIC NOTIFICATION

2. A public water supply that violates the acute coliform bacteria MCL must perform public notification within 24 hours after the system learns of the violation. By the NOV letter dated September 5, 2008, the Winery was informed that it was required to immediately implement public notification. Public notification is required in compliance with department rule 567 Iowa Administrative Code (IAC) 42.1.

3. If the Winery has not complied with the public notification requirements, the Winery is required to immediately comply with the public notice instructions included with the Department's September 5, 2008 NOV letter by giving public notice as required by the instructions. The public notice is required to inform users of this public water supply to not drink the water from this system without boiling the water first. The public notice is required to inform users of the water that it should use boiled or bottled water for drinking, making ice, brushing teeth, washing dishes and food preparation until further notice. The Winery is required to include in the public notice the mandatory language in the example provided with the instructions. The Winery is required to provide a clear explanation of the MCL violation and to include the steps that will be taken to correct the violation in the public notice.

4. The Winery is required to provide public notification designed to reach the users of the Winery's system and fitting the system's specific situation. The public notice is required to include the following forms of delivery. The Winery is required to post the public notice in conspicuous locations throughout the area served by the water system for as long as the MCL violation continues. The Winery is required to deliver copies of the notice by hand to all persons served by the system. The final requirement for the Winery is to submit to the Department a representative copy of each type of notice distributed, published, posted, or made available to the persons served by the system within ten days of completion of the public notice.

If any of the above public notification requirements has not been performed by the Winery, the Winery is required to immediately comply with public notification requirements as set out in and included with the September 5, 2008 NOV letter and by this order.

SELECT ALTERNATIVE TO CORRECT BACTERIA MCL VIOLATION

5. The Winery is required to select an alternative to correct the acute bacteria MCL violation. The three approvable alternatives include installation of continuous chlorination, construction of a new well or connection to an alternate source of water meeting regulatory requirements.

A.1. If continuous chlorination is selected, you are required to install an approved continuous chlorination treatment system on the existing well and to provide chlorination of the Winery's public water supply by September 26, 2008. You must coordinate with the Department's Water Supply Engineering Section and Manchester Field Office to ensure proper installation.

You are then required to obtain Department approval of the as-built plans, specifications, and other documents relating to the continuous chlorination equipment. These documents accompanied by the appropriate fee are required to be completed and submitted to the Water Supply Engineering Section of the Department by October 3, 2008.

Additionally, you are required to have the well inspected by a certified well contractor. A report of the findings, prepared by the certified well contractor, must be submitted to the Department's Water Supply Engineering Section by October 3, 2008. The report must include an evaluation of the sanitary aspects of the well cap, a description of the condition of the full length of the well casing, and recommendations for repairing noted deficiencies.

A.2. The following items are required to be submitted by October 3, 2008:

1) Manufacturer's specifications for the equipment.
2) Department construction application schedules 1A, 1C, 7, 13A, and 13 E. These forms are included with this order. Additional schedules may be required for auxiliary treatment equipment. The additional schedules can be obtained from Cecilia Naughton, Water Supply Operations Section, Iowa Department of Natural Resources, at (515) 725-0289.
3) A detailed drawing of the existing and proposed installation site, including:
a. pipes and valves;
b. chemical application point; and
c. sample tap location.

A.3. Upon receipt by the Department of the above items, the Department will approve, recommend modifications to, or disapprove the installation.

A.4. After installation of chlorination treatment, minimum chlorine residuals of 0.3 mg/L free or 1.5 mg/L total available chlorine (or greater as directed by the Department) must be maintained throughout the system, except for low use or dead end areas. Disinfection residuals shall be monitored on a daily basis, with the results reported to DNR Field Office No. 1 in Manchester on a monthly operation report form. You are required to monitor the chlorine residuals using a reliable field test kit or laboratory method and in compliance with the requirements of 567 IAC 42.4(3).

B. If the option to construct a new public water supply well is selected, you are required to notify the Department in writing of your intent by September 26, 2008. With the notification, you must include an anticipated construction completion date as well as a description of your plans to comply with drinking water standards in the interim. The new well must be constructed and available for use by November 30, 2008. Prior to installation of the new well, you are required to obtain Department approval of the plans, specifications and other documents relating to the new well. Plans and specifications prepared by a registered engineer, accompanied by the appropriate fee, must be submitted to the Department's Water Supply Engineering Section by October 15, 2008. You are required to obtain a written construction permit from the Department's Water Supply Engineering Section prior to installation of the new well. You are required to use a certified well contractor for installation of the new public water supply well, well pump and appurtenances.

C. If the option selected is connection to an alternate water source that currently meets regulatory requirements, you are required to notify the Department in writing of your intent by September 26, 2008. With the notification, you must include an anticipated connection date as well as a description of your plans to comply with drinking water standards in the interim. You must then submit a report concerning this option to the Water Supply Engineering Section of the Department by October 15, 2008. The report is required to include details on the recommended source of water, including the public water supply name, address and phone number. The report must also include a time table for connection to the alternate source of water. The connection must be made and available for use by November 30, 2008.

After the alternate source of water has been approved by the Department, an operation permit with a compliance schedule for implementation will be issued. The final installation must be approved by an on-site inspection by Department staff.

6. The Winery is required to perform all required coliform monitoring, in compliance with the requirements of subrules 41.2(1)"a", "b", and "c" and 41.2(2), including routine and repeat sampling when positive coliform analyses are obtained. The Winery is required to sample for coliform bacteria at a frequency of one sample per month starting immediately and to maintain full compliance with coliform bacteria monitoring requirements.

7. The Winery is required to cooperate fully with the Department in identifying and eliminating the cause of the bacterial contamination, and other important issues identified in the revised water supply operation permit to be issued at a later date.

8. The Winery is required to monitor for nitrate at a frequency of one sample per S/EP per year, in accordance with the existing operation permit and any operation permit reissuance. See Department subrule 567 IAC 41.3(1)"c"(5).

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE ORDER
WINNESHIEK WILDBERRY WINERY, L.L.C.

AUTHORITY: Iowa Code section 455B.175(2), Department rules 567 IAC 41.2 and 42.1, and Department subrules 567 IAC 42.4(3), 43.1(1), and 43.3(1).

APPEAL: This order is immediately effective and binding, until vacated or modified after appeal. Pursuant to Iowa Code section 455B.175 and Department subrule 561 IAC 7.5(1), now 561 IAC 7.4(1), a written Notice of Appeal to the Environmental Protection Commission may be filed within 30 days of receipt of this order. The Notice of Appeal should be filed with the Director of the Department, and must identify the specific portions of this order being appealed, and include a short and plain statement of the reasons for appeal. Any stay of this order must be requested in the Notice of Appeal. A contested case hearing will then be commenced pursuant to Iowa Code chapter 17A and 561 IAC chapter 7.

EFFECT: This order is being issued solely to address the emergency condition, and does not preclude the Department from taking additional enforcement action against the Winery to address this MCL violation or other violations that may exist at this facility.

NONCOMPLIANCE: If the Winery fails to comply with this order, the Winery may be subject to penalties pursuant to Iowa Code sections 455B.109 or 455B.191, and this matter may be referred to the Attorney General to obtain injunctive or other relief through the courts.

Any questions regarding this order should be directed to:

Relating to technical requirements:
Cecilia Naughton
Environmental Specialist
Water Supply Operations Section
Iowa Department of Natural Resources
401 SW 7th Street, Suite M
Des Moines, Iowa 50309-4611
Ph: 515/725-0289

Relating to appeal rights:
Diana Hansen
Attorney at Law
Legal Services Bureau
Iowa Department of Natural Resources
502 E. 9th Street
Des Moines, Iowa 50319-0034
Ph: 515/281-6267

Joe Sanfilippo, Supervisor
Field Office No. 1
Iowa Department of Natural Resources
909 West Main, Suite No. 4
Manchester, Iowa 52057
Ph: 563/927-2640

Dated this 12 day of

RICHARD A. LEOPOLD, DIRECTOR
IOWA DEPARTMENT OF NATURAL RESOURCES Sept., 2008.

Winneshiek Wildberry Winery, L.L.C.- Public Water Supply Id. No. 9630210, Cecilia Naughton- Water Supply Operations Section, Joe Sanfilippo- Field Office No. 1, Diana Hansen- Legal Services, II.B.2.c.(1), II.B.2.g.

IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION

SCHEDULE-1a, General Information

APPLICANT		ENGINEER	
Owner		Firm	
Address		Address	
Representative	Telephone	Project Officer	Telephone

Mail Completed Application Along with the Plans and Specifications to	DNR Use Only
Iowa Department of Natural Resources **Water Supply Section** **401 SW 7th, Suite M** **Des Moines, IA 50309-4611**	Project Number: Permit Number: Facility Number: Field Office Number:

PLEASE RESPOND TO ALL QUESTIONS

1. Project Identification: _____

2. Estimated Completion Date: _____

	YES	NO
3. Will this project be a part of a State Revolving Loan Fund project?	☐	☐
4. Has an engineering report or information previously been submitted for this project? **If Yes =>** Project Identity _____ Date Submitted _____	☐	☐
5. Does the project, as submitted, follow the recommendations and conclusions of the preliminary report? **If No =>** provide design basis and technical information justifying all changes.	☐	☐
6. Are there two complete sets of plans and specifications accompanying this application? Two complete sets of plans and specifications are not required to be submitted for minor water main extensions	☐	☐
7. Except for those projects submitted in accordance with Section 43.3(4), does each set of plans and specifications or engineering report accompanying this application contain an **"Engineer's Certificate,"** executed in conformance with §542B.16, Code of Iowa?	☐	☐
8. Does the project involve water withdrawal, storage of surface waters, or change in natural stream conditions? **If Yes =>** Complete and attach, **Application for Permit to Withdraw Water (DNR Form 16)**	☐	☐

CERTIFICATION

APPLICANT

I certify that I am the authorized representative of the owner and state that the project identified above is approved by the owner.

Signature:	Typed or Printed Name:	Date:

ENGINEER

I certify that all aspects of design included in this application meets the requirements of all applicable state or federal laws and regulations, or that an explanation and justification for any proposed variation from such standards is attached, or that a variance has already been granted by the Iowa Department of Natural Resources.

Signature:	Typed or Printed Name:	Iowa PE Number:	Date:

IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION

SCHEDULE-1a General Information
Page 2 of 2

SCHEDULE	TITLE	Included in Project	Attached	Previously Submitted	Date Previously Submitted
1b	Minor WM Construction Permit	☐	☐	☐	
1c	Fee Calculation		☐		
2a	Water Mains - General	☐	☐	☐	
2b	Water Mains - Specifications	☐	☐	☐	
2c	Notif. of Minor WM Construction	☐	☐	☐	
3a	Water Systems - Preliminary Data	☐	☐	☐	
3b	Source Information	☐	☐	☐	
3c	Water Quality Data	☐	☐	☐	
4	Site Approval	☐	☐	☐	
5a	Well Construction	☐	☐	☐	
5b	Well Appurtenances	☐	☐	☐	
5c	Well Profile	☐	☐	☐	
5d	Surface Water Supply	☐	☐	☐	
6a	*Reserved*				
6b	*Reserved*				
7	Schematic Flow Diagram	☐	☐	☐	
8	Aeration	☐	☐	☐	
9	Clarification/Sedimentation	☐	☐	☐	
10	Suspended Solids Contact	☐	☐	☐	
11	Cation Exchange Softening	☐	☐	☐	
12	Filters	☐	☐	☐	
13a	Chemical Addition	☐	☐	☐	
13b	Dry Chemical Addition	☐	☐	☐	
13c	Gas Chlorination	☐	☐	☐	
13d	Fluoridation	☐	☐	☐	
13e	Sampling and Testing	☐	☐	☐	
14	Pumping Station	☐	☐	☐	
15	Process Water Storage Facilities	☐	☐	☐	
16a	Wastewater General	☐	☐	☐	
16b	Waste Treatment Ponds	☐	☐	☐	
16c	Filtration and Mechanical	☐	☐	☐	
16d	Discharge to Sewer	☐	☐	☐	

Identify any components included in this project which are not included in the above list of schedules (i.e. Reverse Osmosis) and provide design data of these components on separate sheets.

IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY ENGINEERING SECTION
CONSTRUCTION PERMIT APPLICATION

SCHEDULE-1c, Fee Calculation

20 – 2004 - $ _____

Mail the Fee, Along with Completed Application Schedules to:
Iowa Department of Natural Resources
Water Supply Engineering Section
401 SW 7th Street, Suite M
Des Moines, Iowa 50309-4611

Project Identity:	Fee Paid By:

0376 – 542 – W100 - 0575

WATER MAINS

Calculated Fee

Total length of water main: _____ Feet

Fee: First 1000 feet $100
Next 19,000 feet $0.10/ft
Next 300,000 feet $0.01/ft
Over 320,000 feet No additional charge

$ _____

NON-WATER MAIN CONSTRUCTION

Estimated construction cost of non-water main related work: $ _____

Fee: First $50,000 $100
Next $950,000 0.2% of estimated construction cost
Next $14,000,000 0.1% of estimated construction cost
Over $15,000,000 No additional charge

$ _____

REQUEST FOR TIME EXTENSION

Is this a request for a construction permit time extension? Yes ☐ No ☐ (If no, skip this section)

If yes, Request for Time Extension Fee = $50

$ _____

AS-BUILT PROJECT

Is this project being submitted as an As-Built Project? Yes ☐ No ☐ (If no, skip this section)

If yes, also complete "WATER MAINS" and "NON-WATER MAIN CONSTRUCTION" above

Additional As-Built Construction Fee = $200

$ _____

CHANGE ORDERS and ADDENDUM

Will this change order or addendum result in an increase of at least 5% of the original water main length or 5% of the non water main related costs? Yes ☐ No ☐ (If no, skip this section)

Additional length of water main: _____ Feet

Additional non-water main related construction costs: $ _____

Fee = $0.10 per foot for additional water main requested plus 0.2% of the estimated additional non-water main related construction costs (Minimum Fee = $50)

$ _____

AMOUNT PAID BY OWNER OF THE PUBLIC WATER SUPPLY, YEAR TO DATE

Water Main Fees	Total Fees Paid: $ _____	Maximum Annual Fee = $ 5,000
Non-Water Main Fees	Total Fees Paid: $ _____	Maximum Annual Fee = $16,000

TOTAL FEE DUE $ _____

IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION

SCHEDULE-7, Schematic Flow Diagram

Date Prepared	Project Identity
Date Revised	

Provide a schematic of the treatment facility, including treatment units and design capacities, all piping arrangements with pipe sizes and valve locations indicated, chemical application and sample tap locations, flow meters, and other pertinent data.

IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION

SCHEDULE-13a, Chemical Addition

Date Prepared	Project Identity
Date Revised	

1. Design Data:
   a. Chemical Name (i.e. Chlorine, Ortho-phosphate, Caustic soda) _____
   b. State (Granular, Liquid, etc.) _____
   c. Purity: _____ % Density: _____ lb./gallons
   d. Feed Rate: _____ mg/l;
   e. Manufacturer and Model of the Chemical Feeder: _____
   f. Minimum to Maximum Feed Rate of Feeder: _____ lb./day to _____ lb./day
   g. Feeder Accuracy: _____ % Max. Discharge Pressure: _____ psi
   h. Type and capacity of **Scale** if provided: _____
   i. Type and Capacity of **Day Tank** if Provided: _____
   j. Type and Capacity of **Bulk Tank** if Provided: _____

2. For Chlorine addition, what is the raw water concentration of:
   a. Iron _____ mg/L
   b. Manganese _____ mg/L
   c. H_2S _____ mg/L
   d. Ammonia _____ mg/L

2. Average Day water demand: _____ gallons per day.
   Peak Day water demand: _____ gallons per day.
   What is the rate of flow of the **water** at the chemical injection location? _____ gallons per minute.
   (Note: This is usually equal to the capacity of the well pump(s) or high service pump(s) discharging into that line.)

3 Describe the method of determining the liquid level in day and bulk storage tanks:
_____ spec. page no. _____

4. Briefly describe the method of conveying chemicals to and from bulk storage: N/A ☐
_____ spec. page no. _____

5. Describe the control system for each feeder (including on/off, rate adjustment, etc.):
_____ spec. page no. _____

6. How is antisiphon and cross connection control provided for each feeder (water makeup, chemical feed lines, drains & overflows)?
_____ spec. page no. _____

7. Are separate chemical transfer and feed lines provided for each chemical? Yes ☐ No ☐
8. Are chemical storage tanks located above grade? Yes ☐ No ☐
9. Does each tank containing chemical solutions have a valved drain? Yes ☐ No ☐
10. Has a curbed catch basin been provided around acid storage facilities? Yes ☐ No ☐ N/A ☐
11. Are all acid storage tanks vented to the outside atmosphere? Yes ☐ No ☐ N/A ☐
12. If carbon dioxide is being fed: N/A ☐
    a. Is carbon dioxide being generated at the treatment plant site? Yes ☐ No ☐ ; **If Yes =>** what precautions have been taken to prevent the possibility of carbon monoxide entering the treatment plant from recarbonation components?
    _____
    b. Maximum CO_2 feed rate: _____ mg/l
    c. Design detention time in Mixing Basin: _____ minutes; in Reaction Basin: _____ minutes.
    d Is a baffle provided separating the mixing basin from the reaction basin? Yes ☐ No ☐

IOWA DEPARTMENT OF NATURAL RESOURCES
WATER SUPPLY SECTION
CONSTRUCTION PERMIT APPLICATION

SCHEDULE-13e, Sampling and Testing

Date Prepared	Project Identity
Date Revised	

1. List all sample tap locations, indicate the treatment unit for which the sample tap is provided and whether the sampling tap is on the influent or effluent pipe for that unit. For chlorination, fluoridation or phosphate monitoring, include in the location description the distance downstream from the point of chemical addition.

Sample Tap #	Location

2. Provide the following information on all test kits available at the facility:

Water Quality Parameter	Analytical Method Used	Kit Manuf. Name	Kit Number	Test Range	Smallest Increment

3. Additional Comments: